

1 **CLAIMS**

- 2 1. A method for delivering software via a network comprising:
3 describing one or more software extensions using descriptions, the
4 extensions being configured for incorporation in a software platform executing on
5 a client; and
6 delivering the descriptions of the one or more extensions to the client via
7 the network, the descriptions being configured for use in downloading the
8 software extensions via the network.
- 9
- 10 2. The method of claim 1, wherein the network comprises the Internet.
- 11
- 12 3. The method of claim 1, wherein the descriptions comprise a tag-
13 based, hierarchical language.
- 14
- 15 4. The method of claim 1, wherein the descriptions comprise XML
16 descriptions.
- 17
- 18 5. The method of claim 1, wherein:
19 the network comprises the Internet; and
20 descriptions comprise XML descriptions.
- 21
- 22
- 23
- 24
- 25

1 6. The method of claim 1, wherein the software extensions are
2 configured to make context-based changes in the operation of the software
3 platform, the context-based changes being associated with the computing context
4 of a user.

5
6 7. The method of claim 1, wherein the software platform is configured
7 to provide a single application program having multiple different functionalities
8 that can enable a user to accomplish multiple different tasks.

9
10 8. The method of claim 7, wherein the software extensions are
11 configured to make context-based changes in the operation of one or more of the
12 multiple different functionalities that change the manner in which a user can
13 accomplish a task associated with a particular functionality.

14
15 9. The method of claim 1, wherein the software extensions provide user
16 interface elements.

17
18 10. The method of claim 1, wherein the software extensions provide
19 behaviors, components, or objects.

20
21 11. The method of claim 1, wherein the software extensions provide
22 store elements.

1 **12.** The method of claim 1, wherein the software extensions provide
2 user-defined elements.

3
4 **13.** The method of claim 1, wherein the software extensions provide one
5 or more of the following:

6 user interface elements;
7 behaviors, components, or objects;
8 store elements; and
9 user-defined elements.

10
11 **14.** The method of claim 1, wherein at least one extension provides an
12 ability to add new points of extensibility.

13
14 **15.** The method of claim 1, wherein the describing of the one or more
15 software extensions comprises describing the extensions using an extension
16 description file (EDF) comprising an XML file that describes a logical attachment
17 to the software platform.

18
19 **16.** The method of claim 1, wherein one or more of the descriptions
20 contains an implementation of all or part of the functionality of an extension.

G B
DRAFT - DO NOT CITE

1 **17.** One or more computer-readable media having computer-readable
2 instructions thereon which, when executed by a computer system, cause the
3 computer system to:

4 describe one or more software extensions using extensible markup
5 language (XML), the extensions being configured for incorporation in a software
6 platform comprising a single application program, the single application program
7 having multiple different functionalities that can enable a user to accomplish
8 multiple different tasks; and

9 deliver XML descriptions of the one or more extensions to the client via the
10 Internet, the descriptions being configured for use in downloading the software
11 extensions via the Internet.

12
13 **18.** A method for delivering software via a network comprising:

14 describing one or more software extensions using one or more descriptive
15 files, the extensions being configured for incorporation in a software program
16 executing on a client;

17 associating the one or more descriptive files with one or more associated
18 extension files that are useable to provide a program functionality;

19 storing the descriptive files and associated extension files in a network-
20 accessible location; and

21 delivering the descriptive files and the associated extension files of the one
22 or more extensions to the client via a network.

1 **19.** The method of claim 18, wherein said describing comprises
2 describing individual software extensions with at least one XML file, including a
3 description of a logical attachment to the software program, and a description of
4 one or more physical files and/or resources that are used in a software extension.

5
6 **20.** The method of claim 18, wherein the software extensions are
7 configured to make context-based changes in the operation of the software
8 application, the context-based changes being associated with the computing
9 context of a user.

10
11 **21.** The method of claim 18, wherein the software program comprises
12 multiple different functionalities that can enable a user to accomplish multiple
13 different tasks, the one or more software extensions being configured to make
14 context-based changes in the operation of one or more of the different
15 functionalities that change the manner in which a user can accomplish a task
16 associated with a particular functionality.

17
18 **22.** The method of claim 21, wherein the software program comprises a
19 single navigable window that can be navigated by a user between the different
20 functionalities.

21
22 **23.** The method of claim 18, wherein the one or more software
23 extensions provide user interface elements.

1 **24.** The method of claim 18, wherein the one or more software
2 extensions provide behaviors, components, or objects.

3
4 **25.** The method of claim 18, wherein the one or more software
5 extensions provide store elements.

6
7 **26.** The method of claim 18, wherein the one or more software
8 extensions provide user-defined elements.

9
10 **27.** The method of claim 18, wherein the one or more software
11 extensions provide one or more of the following:

12 user interface elements;

13 behaviors, components, or objects;

14 store elements; and

15 user-defined elements.

16
17 **28.** One or more computer-readable media having computer-readable
18 instructions thereon which, when executed by a computer, implement the method
19 of claim 18.

20
21 **29.** A method of delivering software via a network comprising:
22 storing one or more extension definition files (EDFs) that describe a logical
23 attachment to a software application program;
24 storing one or more extension files that correspond to the one or more
25 EDFs and extend the software application program; and

1 delivering, via a network, at least one EDF to a client; and
2 delivering, via a network, at least one extension file that corresponds to the
3 at least one EDF to a client.

4
5 **30.** The method of claim 29, wherein the EDFs are defined in a
6 hierarchical language.

7
8 **31.** The method of claim 29, wherein the network comprises the
9 Internet.

10
11 **32.** The method of claim 29, wherein said acts of storing are
12 accomplished by hosting said files with an Internet server.

13
14 **33.** The method of claim 29, wherein the EDFs comprise XML files.

15
16 **34.** The method of claim 33, wherein the XML files comprise
17 predefined tags that are associated with feature types that are to be added to the
18 application program.

19
20 **35.** The method of claim 34, wherein one or more of the predefined tags
21 correspond to user interface elements.

22
23 **36.** The method of claim 34, wherein one or more of the predefined tags
24 correspond to services which can be behaviors, components, or objects.

1 **37.** The method of claim 34, wherein one or more of the predefined tags
2 correspond to store elements.

3
4 **38.** The method of claim 34, wherein the XML files comprise user-
5 defined tags that are associated with user-defined features that are to be added to
6 the application program.

7
8 **39.** One or more computer-readable media having computer-readable
9 instructions thereon which, when executed by a computer, implement the method
10 of claim 29.

11
12 **40.** A data structure embodied on a computer-readable medium
13 comprising:

14 a first sub-structure indicative of a software extension that is to be
15 incorporated in a software application program;

16 one or more second sub-structures associated with the first sub-structure
17 and indicative of feature types that can be added by the extension to the
18 application program; and

19 one or more third sub-structures associated with the one or more second
20 sub-structures and indicative of features of an associated feature type that can be
21 added by the extension.

22
23 **41.** The data structure of claim 40, wherein the one or more second sub-
24 structures are children of the first sub-structures.

1 **42.** The data structure of claim 40, wherein the one or more third sub-
2 structures are children of the one or more second sub-structures.
3
4

5 **43.** The data structure of claim 40, wherein the one or more second sub-
6 structures are children of the first sub-structures, and the one or more third sub-
7 structures are children of the one or more second sub-structures.
8
9

10 **44.** The data structure of claim 40, wherein the sub-structures comprise
11 XML tags.
12
13

14 **45.** The data structure of claim 40, wherein the feature types comprise
15 one or more of the following feature types:
16
17

- 18 user interface elements;
- 19 behaviors, components, or objects;
- 20 store elements; and
- 21 user-defined elements.

22 **46.** The data structure of claim 40, wherein the data structure comprises
23 an open XML schema that can be extended.
24
25

26 **47.** The data structure of claim 40, wherein the data structure comprises
27 an open XML schema that can be extended by third parties.
28
29

S
B
DRAFT - 06/06/2004

1 **48.** A method of delivering software via a network comprising:
2 navigating to a network site that maintains at least one software application
3 program; and
4 downloading a software application program from the network site, the
5 application program comprising multiple different functionalities that can assist a
6 user in accomplishing different tasks, the software application program being
7 configured to be extended with software extensions that are deliverable via a
8 network and are described by at least one network-deliverable file.

9
10 **49.** The method of claim 48, wherein the application program comprises
11 a single navigable window that can be navigated by a user between the multiple
12 different functionalities.

13
14 **50.** The method of claim 48 further comprising extending the software
15 application program by adding at least one extension to the application program.

16
17 **51.** The method of claim 50, wherein said extending comprises:
18 using a link to navigate to a different network site that hosts one or more
19 XML files that describe the extension, and extension files that are used to
20 implement the extension; and
21 downloading the one or more XML files and the extension files to a client.

1 **52.** The method of claim 51, wherein one of the XML files comprises a
2 file that logically describes an extension, and one of the XML files comprises a
3 file that describes the extension files.

4
5 **53.** The method of claim 51, wherein the link is stored in a user
6 preference.

7
8 **54.** One or more computer-readable media having computer-readable
9 instructions thereon which, when executed by a computer, cause the computer to:

10 navigate to a network site that maintains at least one software application
11 program;

12 download a software application program comprising multiple different
13 functionalities that can assist a user in accomplishing different tasks, the software
14 application program being configured to be extended with software extensions that
15 are deliverable via the network and described by at least one network-deliverable
16 file; and

17 extend the software application program by adding at least one extension to
18 the application program, the extension being added by using a link to navigate to a
19 different network site that hosts one or more files that describe the extension, and
20 extension files that are used to implement the extension and downloading the one
21 or more files and the extension files to a client.

22
23 **55.** A method of delivering software via a network comprising:
24 accessing a Web site through which one or more software extensions can be
25 obtained;

1 receiving at least one file that describes at least one software extension
2 using a hierarchical language that describes the software extension's logical
3 attachment to a software application program;
4 receiving one or more software extension files; and
5 installing the one or more software extension files based, at least in part, on
6 the description contained in said at least one file.

7

8 56. The method of claim 55, wherein the hierarchical language that
9 describes the software extension's logical attachment comprises a tag-based
10 language.

11

12 57. The method of claim 55, wherein the hierarchical language that
13 describes the software extension's logical attachment comprises extensible markup
14 language (XML).

15

16 58. The method of claim 55, wherein said installing comprises doing so
17 without manipulating a client registry or any registry keys that are permanently
18 persisted on the client machine.

19

20 59. The method of claim 55, further comprising determining whether an
21 update to a software extension is available and, if so, receiving update extension
22 files.

1 **60.** The method of claim 59, wherein said determining comprises
2 polling an extension catalog.

3
4 **61.** The method of claim 59, wherein said determining comprises
5 polling an extension catalog comprising an XML file.

6
7 **62.** One or more computer-readable media having computer-readable
8 instructions thereon which, when executed by a computer, cause the computer to
9 implement the method of claim 55.

10
11 **63.** A method of providing software for delivery over a network
12 comprising:

13 describing one or more software extensions using one or more extensible
14 markup language (XML) files, the extensions being configured for incorporation
15 in a software program executing on a client;

16 associating the one or more XML files with one or more associated
17 extension files that are useable to provide a program functionality; and

18 storing the XML files and associated extension files in a network-accessible
19 location.

20
21 **64.** A network site through which a client can access software files
22 comprising:

23 one or more software extension files configured to be incorporated into a
24 software application program and delivered via a network; and

1 one or more files associated with the one or more software extension files
2 and describing the extension files, the one or more files describing a logical
3 attachment of the one or more software extension files to the software application
4 program.

5
6 **65.** The network site of claim 64, wherein the hierarchical language
7 comprises extensible markup language (XML).

8
9 **66.** A method of managing network-based software extensions
10 comprising:

11 grouping multiple software extension descriptions in a catalog in a
12 network-accessible location;

13 accessing the network-accessible location; and

14 using the catalog to update a software extension that is resident on a
15 computing device.

16
17 **67.** The method of claim 66 further comprising querying the catalog to
18 ascertain an extension description.

19
20 **68.** The method of claim 66 further comprising querying the catalog
21 based on a user's personal setting.

22
23 **69.** The method of claim 66, wherein the extension descriptions are
24 defined in XML.